

WHAT IS CLAIMED IS:

1. A print control apparatus for performing user authentication processing in print processing, characterized by comprising:

5 a job combination unit for combining a plurality of print jobs into a single combined print job; and
a request unit for issuing a request to an authentication server for getting a permission to print the single print job combined by said job combination
10 unit,

wherein if the authentication request succeeds, the combined print job is transmitted.

2. The apparatus according to claim 1, characterized by further comprising a counting unit for counting a
15 print amount including the number of prints to be printed by the combined print job and transmitting information about the counted print amount to a counting server.

3. The apparatus according to claim 1, characterized
20 in that

the authentication server and the print control apparatus are connected via a communication network, and the communication network is connected to a plurality of printers.

25 4. The apparatus according to claim 1, characterized in that the authentication server is provided by a printer.

5. The apparatus according to claim 1, characterized in that the print control apparatus includes a host computer.

6. A print control method of performing user authentication processing in print processing, characterized by comprising:

the job combination step of combining a plurality of print jobs into a single combined print job; and

the authentication request step of issuing an authentication request to an authentication server for the single print job combined in the job combination step,

wherein if the authentication request succeeds, the combined print job is transmitted.

15 7. The method according to claim 6, characterized by further comprising the counting step of counting a print amount including the number of prints to be printed by the combined print job and transmitting information about the counted print amount to a counting server.

20 8. The method according to claim 6, characterized in that the authentication server is included in a printer.

9. A computer-readable storage medium which stores a computer program for performing user authentication processing in print processing, characterized by

25 including:

a code of the job combination step of combining a plurality of print jobs into a single combined print

job; and

5 a code of the authentication request step of
 issuing an authentication request to an authentication
 server for the single print job combined in the job
 combination step,

 wherein if the authentication request succeeds,
 the combined print job is transmitted.

10. The medium according to claim 9, characterized by
 further comprising a code of the counting step of
10 counting a print amount including the number of prints
 to be printed by the combined print job and transmitting
 information about the counted print amount to a counting
 server.

11. The medium according to claim 9, characterized in
15 that the authentication server is provided by a printer.

12. A computer program for performing user
 authentication processing in print processing,
 characterized by including:

20 a code of the job combination step of combining a
 plurality of print jobs into a single combined print
 job; and

25 a code of the authentication request step of
 issuing an authentication request to an authentication
 server for the single print job combined in the job
 combination step,

 wherein if the authentication request succeeds,
 the combined print job is transmitted.

13. A print system for performing user authentication processing in print processing, characterized by comprising:

 a print control apparatus having a job combination
5 unit for combining a plurality of print jobs into a single combined print job, an authentication request unit for issuing an authentication request to an authentication server for the single print job combined by the job combination unit, and a transmission unit for
10 transmitting the combined print job to a printer if the authentication request succeeds; and

 an authentication server connected to said print control apparatus.

14. The system according to claim 13, characterized in
15 that

 the system further comprises a counting server connected to said print control apparatus, and
 said print control apparatus counts a print amount including the number of prints to be printed by the
20 combined print job and transmits information about the counted print amount to the counting server.

15. The system according to claim 13, characterized in that said authentication server is provided by one of printers connected to said print control apparatus.

25 16. A print control apparatus for performing user authentication processing in print processing, characterized by comprising:

a holding unit for holding authentication information input from software for generating print data;

 an authentication request unit for transmitting 5 the authentication information held by said holding unit to an authentication server and requesting authentication; and

 an output unit for transmitting the authentication information held by said holding unit to the 10 authentication server and if authentication succeeds, outputting print data to a printer.

17. The apparatus according to claim 16, characterized by further comprising a re-input unit for re-inputting the authentication information held by said holding unit 15 if the authentication request from said authentication request unit fails.

18. The apparatus according to claim 16, characterized by further comprising a confirmation unit for causing a user to confirm the authentication information held by 20 said holding unit before the authentication information is transmitted from said output unit to the authentication server.

19. The apparatus according to claim 18, characterized in that 25 the apparatus further comprises a setting unit for setting whether to cause the user to confirm the authentication information via said confirmation unit,

and

when said setting unit sets the authentication information so as not to confirm the authentication information via said confirmation unit, said 5 confirmation unit does not operate.

20. The apparatus according to claim 16, characterized by further comprising a counting unit for counting a print amount including the number of prints by the printer on the basis of print data output from said 10 output unit and transmitting information about the counted print amount to a counting server.

21. The apparatus according to claim 16, characterized in that

the authentication server and the print control 15 apparatus are connected via a communication network, and the communication network is connected to a plurality of printers.

22. The apparatus according to claim 16, characterized in that the authentication server is provided by the 20 printer.

23. The apparatus according to claim 16, characterized in that

the apparatus further comprises a designation unit for designating whether to hold the authentication 25 information by said holding unit, and when said designation unit designates not to hold the authentication information, the authentication

information held by said holding unit is erased every authentication.

24. The apparatus according to claim 23, characterized in that

5 a user is assigned an identifier and an authority level corresponding to the identifier, and
the apparatus further comprises a validating unit for validating said designation unit when the authority level assigned to the user is a predetermined authority
10 level.

25. A print control method of performing user authentication processing in print processing, characterized by comprising:

the authentication request step of transmitting,
15 to an authentication server, authentication information held by a holding unit for holding authentication information input from software for generating print data, and requesting authentication; and

the output step of transmitting the authentication
20 information held by the holding unit to the authentication server and if authentication succeeds, outputting print data to a printer.

26. The method according to claim 25, characterized by further comprising the re-input step of re-inputting the
25 authentication information held by the holding unit if the authentication request in the authentication request step fails.

27. The method according to claim 25, characterized by further comprising the confirmation step of causing a user to confirm the authentication information held by the holding unit before the authentication information 5 is transmitted to the authentication server in the output step.

28. The method according to claim 27, characterized in that

the method further comprises the setting step of 10 setting whether to cause the user to confirm the authentication information in the confirmation step, and when the authentication information is set in the setting step so as not to confirm the authentication information in the confirmation step, the confirmation 15 step is not performed.

29. The method according to claim 25, characterized by further comprising the counting step of counting a print amount including the number of prints by the printer on the basis of print data output in the output step and 20 transmitting information about the counted print amount to a counting server.

30. The method according to claim 25, characterized in that the authentication server and a plurality of printers are connected to a single communication network.

25 31. The method according to claim 30, characterized in that the authentication server is provided by the printer.

32. The method according to claim 25, characterized in that

the method further comprises the designation step of designating whether to hold the authentication 5 information by the holding unit, and

when the authentication information is designated in the designation step so as not to hold the authentication information, the authentication information held by the holding unit is erased every 10 authentication.

33. The method according to claim 32, characterized in that

a user is assigned an identifier and an authority level corresponding to the identifier, and

15 the method further comprises the validating step of validating the designation step when the authority level assigned to the user is a predetermined authority level.

34. A computer-readable medium which stores a computer 20 program for performing user authentication processing in print processing, characterized by comprising:

the authentication request step of transmitting, to an authentication server, authentication information held by a holding unit for holding authentication 25 information input from software for generating print data, and requesting authentication; and the output step of transmitting the authentication

information held by the holding unit to the authentication server and if authentication succeeds, outputting print data to a printer.

35. The medium according to claim 34, characterized by
5 further comprising the re-input step of re-inputting the authentication information held by the holding unit if the authentication request in the authentication request step fails.

36. The medium according to claim 34, characterized by
10 further comprising the confirmation step of causing a user to confirm the authentication information held by the holding unit before the authentication information is transmitted to the authentication server in the output step.

15 37. The medium according to claim 36, characterized in that

the medium further comprises the setting step of setting whether to cause the user to confirm the authentication information in the confirmation step, and
20 when the authentication information is set in the setting step so as not to confirm the authentication information in the confirmation step, the confirmation step is not performed.

38. The medium according to claim 34, characterized by
25 further comprising the counting step of counting a print amount including the number of prints by the printer on the basis of print data output in the output step and

transmitting information about the counted print amount to a counting server.

39. The medium according to claim 34, characterized in that the authentication server and a plurality of 5 printers are connected to a single communication network.

40. The medium according to claim 39, characterized in that the authentication server is provided by the printer.

41. The medium according to claim 34, characterized in 10 that

the medium further comprises the designation step of designating whether to hold the authentication information by the holding unit, and

when the authentication information is designated 15 in the designation step so as not to hold the authentication information, the authentication information held by the holding unit is erased every authentication.

42. The medium according to claim 41, characterized in 20 that

a user is assigned an identifier and an authority level corresponding to the identifier, and

the medium further comprises the validating step 25 of validating the designation step when the authority level assigned to the user is a predetermined authority level.

43. A computer program for performing user

authentication processing in print processing,
characterized by comprising:

the authentication request step of transmitting,
to an authentication server, authentication information
5 held by a holding unit for holding authentication
information input from software for generating print
data, and requesting authentication; and

the output step of transmitting the authentication
information held by the holding unit to the
10 authentication server and if authentication succeeds,
outputting print data to a printer.

44. A print system for performing user authentication
processing in print processing, characterized by
comprising:

15 a print control apparatus having a holding unit
for holding authentication information input from
software for generating print data, an authentication
request unit for transmitting the authentication
information held by said holding unit to an
20 authentication server and requesting authentication, and
an output unit for transmitting the authentication
information held by said holding unit to the
authentication server and if authentication succeeds,
outputting print data to a printer; and
25 an authentication server connected to said print
control apparatus.